

## **Easily Upgrade a Watlow® F4T® Controller or D4T™ Data Logger**

Watlow's F4T® temperature and process controller is a powerful, best-in-class device offering industry-leading functionality. The D4T™ data logger features field removable input/output modules for maximum design flexibility. Now, new upgrades are available for both the F4T and D4T that provide enhanced capabilities and can be activated with an emailed upgrade code.

When connected to an F4T controller or D4T data logger, clicking the upgrade icon in COMPOSER® software allows users to easily enter an upgrade code.

If and when users desire an upgrade, they can purchase the upgrade code through their Watlow® representative to access and use the new features.

## **F4T and D4T Upgrade Features**

The software upgrade features for these devices include:

### **Update Data Logging with or Without File Encryption**

Both the F4T and the D4T can be upgraded to save process data in files that can be downloaded to make records of critical processes. This feature date and time stamps user-selected parameters as it records them in files saved to the device's internal memory or an external flash drive connected to a USB port.

A data log file encryption option is available. When your data needs advanced protection from alteration or tampering, file encryption is the answer.

### **Add Trending Charts**

This upgrade allows users to view graphic charts to visualize and monitor system operations and progress.

Users can configure up to four charts with six trend lines available on each. Users can also export shareable chart graphics for reporting purposes or future reference.

## **Continued**

## Add Function Blocks

Function blocks allow users to customize F4Ts and D4Ts for their applications. All F4T controllers and D4T data loggers include some function blocks. Upgrading the function block option allows users to customize their devices to suit their unique needs with an expanded library of function blocks.

For example, some users may need to maintain a consistent operating temperature within a specific range. An alarm block can be connected to an input to notify users of temperature fluctuation. The basic function block set includes six alarms, and upgrading adds more alarm blocks. Upgrades also add timers, counters, and mathematical and logic blocks to automate some processes.

## Add Profile Ramp and Soak (F4T only)

Most F4T controllers already include the ramp and soak profiling feature, but it is possible to add this feature with an upgrade if the model does not already include it. Ramp and soak profiling allows users to program a series of steps that can, for example, increase a temperature over time, hold it steady and decrease it to thermally process or test a product in a chamber.

## Increase the Number of Control and Cascade Loops (F4T only)

Upgrading adds control and/or cascade loops to allow users to control more temperatures or other process variables. Users who need more control will also likely need more hardware for this upgrade. Additional hardware includes flex modules and wiring to be added to your machine.

## How to Upgrade Your F4T or D4T

If your system may benefit from an F4T or D4T upgrade, please contact your Watlow representative to purchase an upgrade code. **You will need to provide your current part number and serial number.**

## Continued

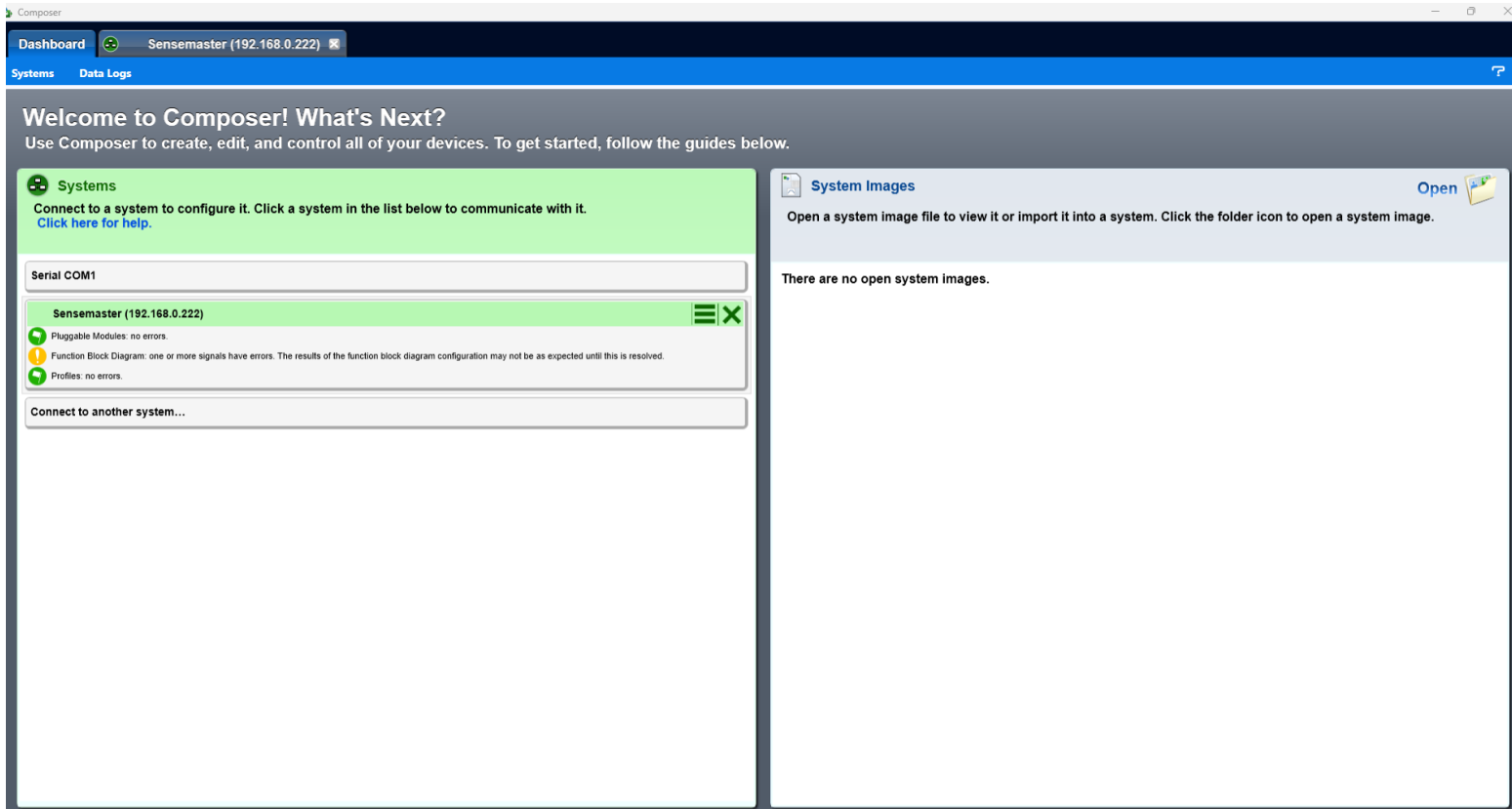
[After purchase, an email code will be sent that can be easily entered into the device.](#)

If you are unsure about your Watlow controller or have questions about whether an upgrade makes sense for your application, connect with Sensemaster. We can help you find the ideal solution for your needs.

Please use our contact details as per our footer on each page.

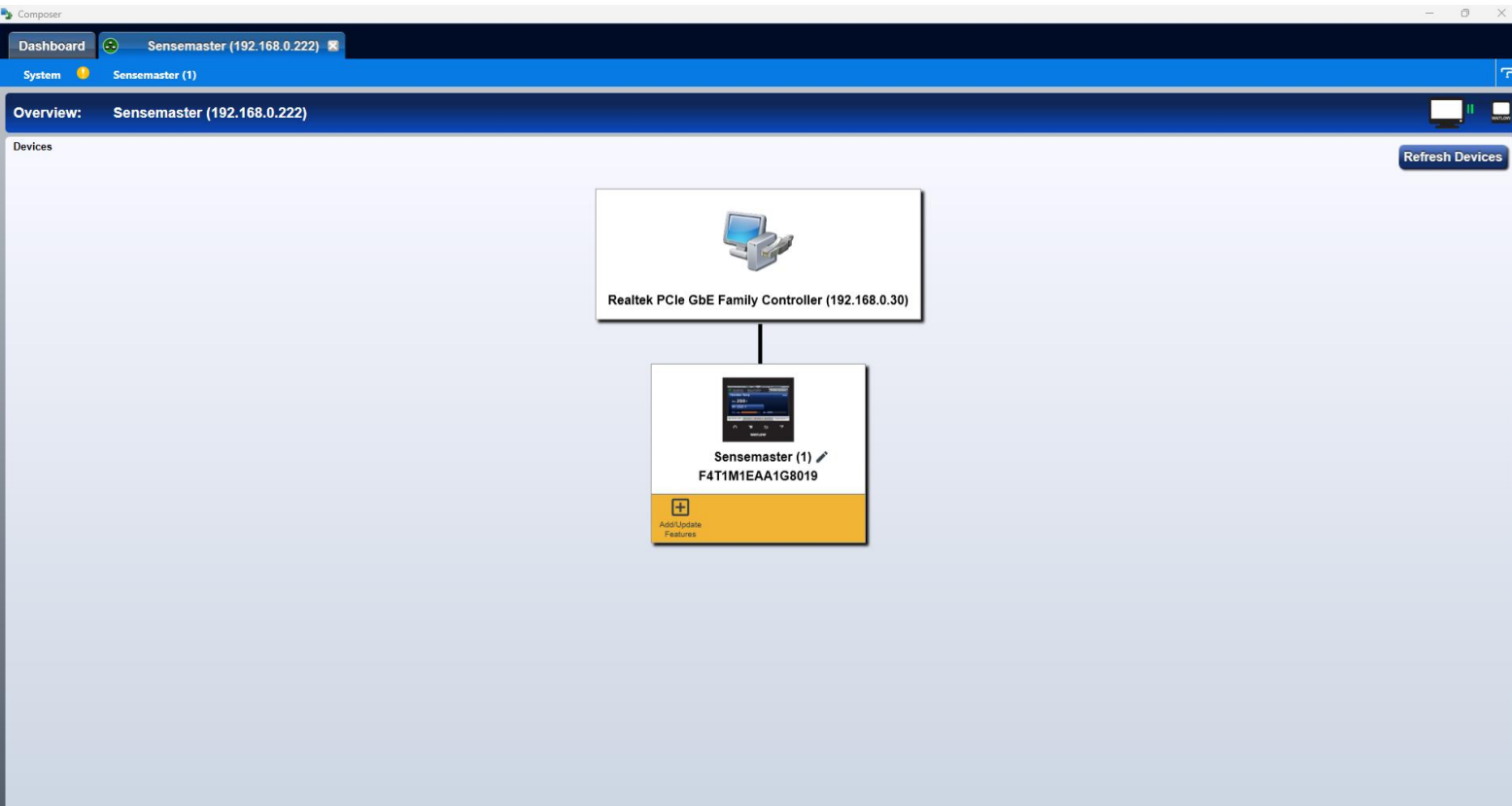
## Entering code using Composer Software:

Connect with your F4T by clicking on the green bar IP address for your F4T.



The screenshot shows the Composer software interface. The top navigation bar includes 'Dashboard', 'Systems', and 'Data Logs'. The main content area is titled 'Welcome to Composer! What's Next?' and provides instructions on how to use the software. The 'Systems' panel is active, displaying a list of systems. The 'Sensemaster (192.168.0.222)' system is highlighted in green. Below the system name, there are status indicators for 'Pluggable Modules: no errors', 'Function Block Diagram: one or more signals have errors. The results of the function block diagram configuration may not be as expected until this is resolved.', and 'Profiles: no errors.'. A 'Connect to another system...' button is also visible. The 'System Images' panel on the right is currently empty, showing 'There are no open system images.' and an 'Open' button.

When your connection block diagram is displayed, you will see Add Update Features beneath your F4T model number icon:



Click on Add Updates Features & the Feature upgrade screen will appear.

Cut & paste the code that was emailed to you into the unlock code box & click on upgrade.

Follow on screen prompts.

